Volunteer Firemen

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International

The delay caused by the bursting of hose was a principal factor in this fire in St. Marys, West Virginia, in January, which caused the destruction of four buildings in the center of town.

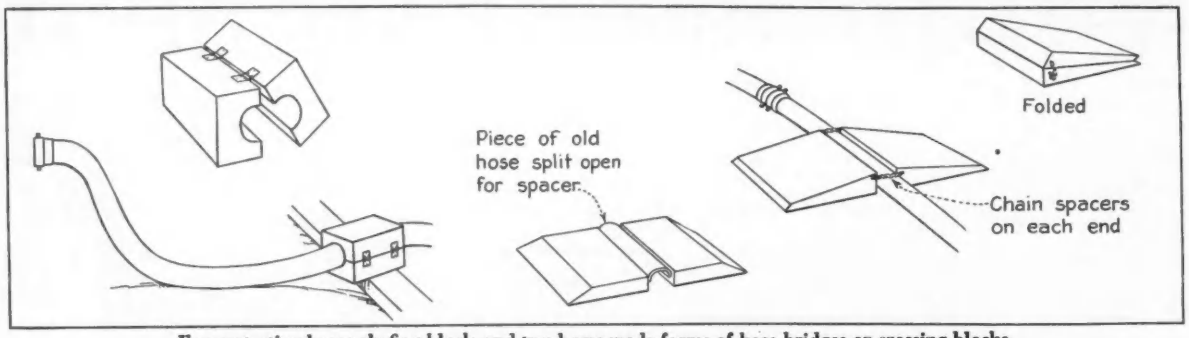
When Fire Hose Bursts

Loss of Life and Property Usually Follows Failure of Hose, But Disaster Is Avoided When Hose Is Good, Gets Proper Use and Care

SUCCESSFUL fire fighting depends upon adequate fire streams, and adequate fire streams depend largely upon well made and properly maintained hose.

When hose has been neglected for one reason or another and a section or more of it bursts at a fire, the time it takes to replace the section may permit the fire to get beyond control. A rupture in a hose may also be responsible for serious injury to firemen and to people watching the fire.

At St. Marys, West Virginia, during the cold spell in January, the volunteer fire department responded to an alarm for a fire caused by a poorly constructed and overheated chimney in a novelty store. Shortly after the firemen got their hose line in operation, a section ruptured and the five minutes required to replace it allowed the fire to get out of control. Although pumpers, equipment and men arrived from three nearby towns and helped prevent further spread of the fire, four frame buildings housing a novelty store, furniture storage, jewelry store, grocery, beauty parlor, I.O.O.F. Hall, and a dry goods store were completely destroyed.



For protecting hose: chafing block, and two home-made forms of hose bridges or crossing blocks.

It is hardly to be expected that there never will be an occasion when a length of hose may suddenly develop weakness, due to an unobserved injury for example, but there was certainly something wrong with the procedure followed in a case in a southern community where the department was called to a fire in a cotton warehouse. The location of the building required a line of hose 900 ft. long. As soon as the pumper was connected and started, a section of hose burst, causing a delay of two minutes to replace it. The pumper was started up again and another section failed. This procedure continued until seven sections had proven defective, a total delay of some 15 minutes. When water was finally available from the nozzle, the fire was far beyond possible control and in 10 more minutes the entire warehouse collapsed. Nearly 3,000 bales of cotton were destroyed.

Any department can prevent such a situation. If there is any doubt about the hose on their wagons, each length can be taken off and subjected to a 200-pound pressure test. This can be done with a small hand or power pump, or by laying out a line and putting the pressure in the line up to 200 pounds or more with the pumper.

At the start, good hose should be purchased. How hose should be constructed is covered by the specifications of the National Fire Protection Association, drawn up with the co-operation of the American Society for Testing Materials, the United States Government and a number of other leading national organizations. Underwriters' Laboratories, Inc., of Chicago, affixes a label to hose which meets these specifications. This identifies hose which meets every practical demand of the fire service.

Cotton rubber-lined fire hose is commonly used for fire service in the United States and Canada. Such hose is made single jacketed, or with double or triple jackets. The extra jackets are primarily for the purpose of protecting against mechanical injury, and are appropriate for hose used by companies in districts where it gets very hard service. Many departments whose work is in residential or rural territory and where working fires are relatively infrequent, find that there is a definite advantage in using the single jacketed hose because it is lighter and therefore easier to handle. Also, more of it can be carried on a truck and it can more easily be cleaned and cared for.

A pamphlet on Care of Hose will be sent free to any reader of VOLUNTEER FIREMEN on request to the N.F.P.A. Executive Office, 60 Batterymarch St., Boston, Mass.

In keeping track of the condition of hose it is helpful to number each length and keep a book or card record which would show date of purchase, maker, dates of testing and pressures, and remarks as to condition. The commonest failures of hose come from its use by inexperienced men. No hose is strong enough to always stand up against the "back pressure" or "water hammer" effects of suddenly closing down a shut-off nozzle.

Care should be taken that gasoline, oils, and chemicals do not come in contact with hose as they are likely to injure the jackets and lining.

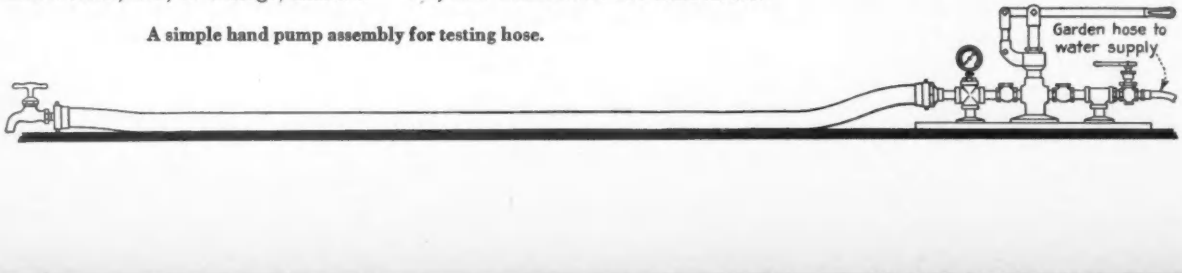
Driving vehicles over hose lines should be avoided. Strangely enough, more damage is likely to be done this way to the hose when it is flat than when the line is charged with water. In the latter case the water tends to prevent distortion of the hose and the ordinary pneumatic tire of an automobile may not always do damage. Hose may be injured also if dragged over rough pavement or sharp objects. Vibrations from the pumper transmitted along the hose may chafe and cut the jacket where it passes over stones or sharp-edged objects.

Frozen fire hose should be handled with the least amount of bending to prevent the cotton threads from breaking. Excessive heat is injurious to the rubber lining.

After being used at fires or tested, each length of hose should be cleaned. Soaking softens any dirt in the jacket. It should then be scrubbed and rinsed, and hung up or placed on a rack to dry. All hose once wet, should be carefully drained.

Hose should be folded in such a way that air can circulate and prevent the formation of mildew. At least six times a year it should be removed from the truck, examined for mold and rearranged with the folds in different places. It is desirable to pass water through the hose under pressure at least four times a year.

Sufficient hose should be kept on hand to allow for proper testing, overhauling couplings, or for drying the hose after a fire.



A simple hand pump assembly for testing hose.

Making a Good Job of It

By Warren Kimball

In this column each month an experienced volunteer fireman discusses the handling of a typical fire. Readers are invited to describe fires which illustrate one or more principles of craftsmanlike fire fighting. (Names and places may be omitted.)

VOLUNTEER firemen responding to an alarm found a serious fire in the living room of a beautiful home of the local doctor. While placing the first stream to prevent the fire from spreading up the main stairway, they were informed that valuables worth a large amount of money had been left on a dresser on the third floor. The house was old and without fire-stopping and the fire had spread into the partitions. The entire house was charged with heat and smoke. A frozen hydrant had delayed the firemen and snow drifts prevented the quick use of ladders so that it was doubtful whether the house could be saved.

Depending on the hose stream to keep the way of escape down the stairway safe, the firemen formed a human chain and crawled up one behind the other until the leader reached the top floor room and recovered the property. The instructions were to keep talking because as long as a man could keep talking, he was considered safe.

It is extremely questionable whether any personal property justifies the risking of men's lives. Many persons have lost their lives by attempting to save valuables. However, when it is necessary to enter a burning building for rescue work, remember these rules: 1. Don't go in alone; at least two should work together. 2. Attempt to determine where you are going and how you are going to get out. 3. Never enter a burning building unless you tell some responsible person where you are going. 4. Never rush in to save someone without first sizing up the situation. A few seconds spent in looking over the building and locating possible exits may save your life as well as the possible victims.

In removing victims overcome by dense smoke it is usually difficult to go any considerable distance unless firemen are equipped with gas or smoke masks. Even with masks, training and good judgment are necessary due to limited vision and danger of becoming lost.

A typical water hole for pumper suction a few miles from historic Plymouth Rock. A shallow ditch from a near-by swamp supplies it with water.

Checking Up on Water Holes

DURING the winter of 1933-1934, approximately 1,005 water holes and other sites for fire department pumper suction were constructed in various communities in Massachusetts where other sources of water were not available. The holes were provided with Federal funds under the direction of the state department of agriculture with the co-operation of local fire organizations and farm associations.

A recent check-up by the State Fire Marshal's office revealed that these water holes had been used at 84 fires with losses totaling $105,000. It was estimated that the losses would have been about seven times as great had the water holes not been available.

The survey emphasized the importance of maintenance for such water sources. Three-quarters of the water holes were full of water but in 251 cases were dry. Steps to assure the refilling and future maintenance of these dry units have been recommended to local authorities.

To the credit of these water sites is the protection they are affording. Over 9,750 buildings and their contents having an estimated value of over $22,000,000 are now protected by these 754 new sources for pumper suction, and many a fire chief with a good department and equipment is breathing easier than he did a couple of years ago because he knows that the property under his care can be better taken care of in case of fire. In one dwelling fire, the building was a mass of flames within 15 minutes of the start of the fire and had spread to wooden shingle roofs of four other buildings, but it was controlled by the use of water from a sump hole from which the fire department pumper took suction.

The success of these projects as shown by this survey should stimulate local authorities to construct more such sources of water for fire protection.

Volunteer firemen throughout the state took a prominent part in developing this valuable protection in rural communities where there were no fire hydrants or other sources of water for pumper suction. In some cases volunteer fire chiefs worked as foremen and in many instances volunteer firemen were employed on the projects.

The existing water holes are in many forms. In some small towns storage reservoirs or cisterns of 15,000 to 25,000 gallons capacity were provided and filled from wells or small brooks. They provide a supply which is readily available for use at the start of the fire and can take care of several hose lines. Brooks were widened or deepened to make it possible for pumpers to take suction from them with the suction hose strainer at least two feet under the surface. Many times it was necessary to prepare driveways and approaches to the sites so that pumpers could get conveniently near.

Salt water inlets along the shores as well as lakes and ponds were made available as water sources by constructing suitable approaches.

Mutual Aid in Westchester County, N. Y.

The Problem of 48 Departments in a Typical Suburban County and How It Is Being Met by the "Fire Chiefs' Emergency Plan"

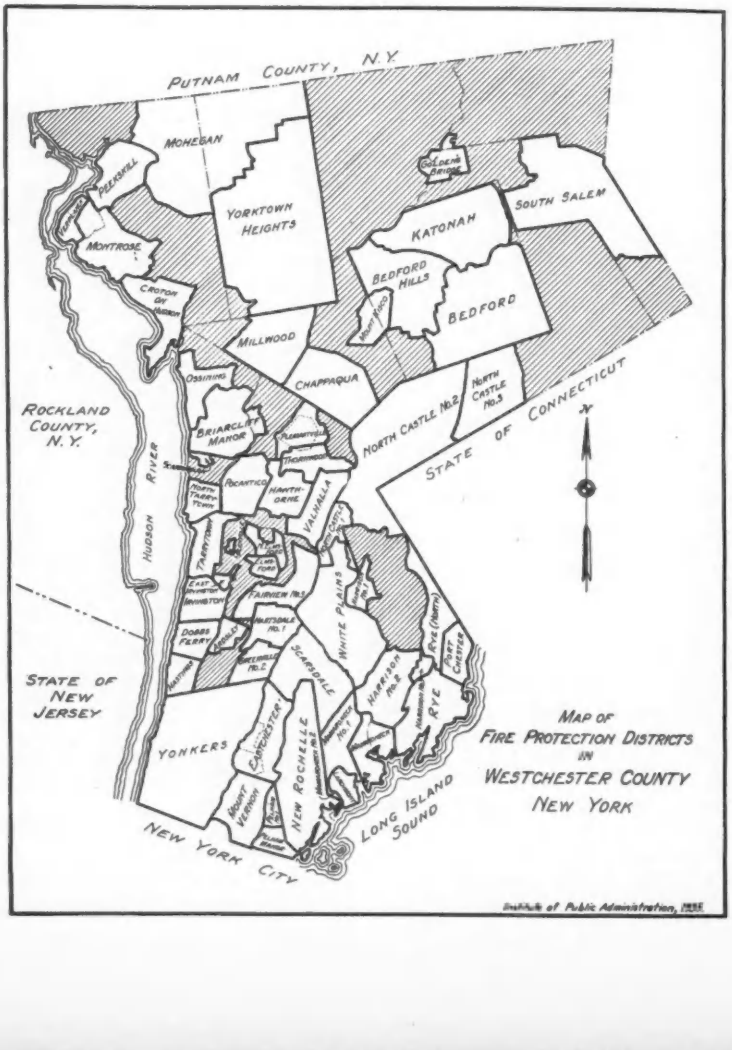
TO PROMOTE co-operation between fire departments in Westchester County, New York, so that adequate assistance from surrounding towns may be called for when needed, fire chiefs in the county organized the Westchester County "Fire Chiefs' Emergency Plan" about seven years ago. To date this mutual aid plan has worked very well. Just recently the towns of Elmsford, Port Chester, Fairview, and Greenwich called for assistance, and had it not been for this prearranged plan serious conflagrations might have resulted.

The backbone of the plan is the table on the next page which lists the fire departments in alphabetical order and shows what apparatus, equipment, and manpower each one has. It also includes the addresses and telephone numbers of fire headquarters and the names of the chiefs. Each chief has a copy of this table printed on a card 19 in. by 24 in. in size.

Knowing the location of the fire protection districts surrounding his community (see the accompanying map), and from the table of equipment, a chief knows at once where he can get the help he needs for a certain serious fire in the shortest time. Each chief has listed the departments from which he may have occasion to summon aid—for example, the chief at Mount Vernon in the southern part of the county has chosen Yonkers, Eastchester, Pelham, New Rochelle, and New York City.

Before the plan was put into operation, the fire chiefs worked for and secured the adoption of two important state laws. The first, passed in 1931, authorizes towns or fire districts to adopt ordinances permitting their fire departments or companies to send aid to other towns or fire districts. It also provides that any loss or damage to the fire apparatus belonging to the town or district answering such a call shall be paid for by the town or district asking for the assistance. The second law, amended in 1935, provides that when a volunteer fireman is injured or killed while assisting a neighboring town or fire district, or while going to or returning from a call for aid, the town or district asking for the assistance shall pay the injured volunteer fireman, or his representative if he is killed, specified sums of money.

These laws eliminated some of the difficulties facing fire departments which render assistance to neighboring communities. The payments for damages, injuries, or deaths are fixed by the New York State Law as a charge against the persons and property liable to taxation in the community which issued the call for assistance and in which the fire occurred.



ACCORDING to a recent survey of all the fire protection facilities in the county made by the Institute of Public Administration for the Westchester County Commission on Government, 44 of the 56 fire protection districts have volunteer departments, eight districts are in unincorporated territory and contract with nearby districts for fire protection service, and the other four have paid fire departments. Most of these districts are listed in the accompanying table.

The number of volunteers in the 44 towns or districts varies from 17 in Amawalk Lake to 425 in Peekskill, with an average of 130 and a total of nearly 6,000 men. In addition, 18 of the 44 towns have one or more paid men. Bedford Hills, Dobbs Ferry, and Hastings each pay one man nominal salaries, and the other 15 range from one paid man in Irvington to 20 paid men in the Eastchester Consolidated

Westchester County Fire Chiefs' Emergency Plan

DEPARTMENT	Pumpers	Aerials	C. Service	Hose Wagons	Hose No. Feet	Dia. Inch Thread	Hydrant Thread	Foam Generator	Lbs. Foam Powder	Inhibitor	Ex. Tanks	Water	Flood Lights	Brings Mounted	Sets Portable	Hospital or Ambulance	Men Paid	Men Vol.	Headquarters	Telephone	Chief	Oxygen Masks	Asphyxia Torch	Breathing Hooks
Amawalk Lake Ardsley Armonk	1-750 1-750			1 1 Emerg.	400 1,000	N. S. N. S. Ada. N. S.						Good Good Brooks & Ponds				Dobbs Ferry Mt. Kisco		17 60	Ashford Ave. Maple Ave.	D. F. 213 Armonk 494	Welbn Wilmot Abrams			
Briarcliff Manor Bedford Hills Bedford Village	1-750; 1-1000 1-350; 1-500 1-1000; 1-350		1	6-Tank Chem. 1 6-Tank Chem. 1 2-Tank Chem.	4,000 3,000	N. S. N. S. N. S.	4½–6 4½–6		300			Good Good Ponds			1	Ossining Mt. Kisco Mt. Kisco		60 60	State Road State Road Village Circle	Briarcliff 2130 Mt. K. 4079 B. V. 600	Matthes Reynolds Kinkle			
Chappaqua Crotonville-Hudson Dobbs Ferry	2-500 1-400; 1-350; 1-500 1-750	1-85	1	1 Chem. 1 Hose	2,700 2,000 3,000	N. S. N. S. N. Y. Ada.	4½–6 4½–6 3½–6			1 1	3 4	N.Y. City Good Good				Mt. Kisco Peekskill Dobbs Ferry		160 140 140	Senter Street Police Dept. Main Street	Chap. 453 Croton 727 D. F. 2000	Berner Flood Menahan			
Eastchester Elmsford Fairview	2-750; 1-600; 1-400 1-600; 1-750 1-1000	1-75	1 1	1 Emerg.	10,000 4,000 1,200	N. Y. Ada. N. S. Ada. N. S. Ada.	4½ Ada. 4½–6 4½–6			1 1	4 2	Good Good Good	1		1	W. P or Tarry. White Plains	30 4	300 90	Underhill Tarrytown Rd. Rosemont Blvd	Tuc. 6400-2001 1915 W. P. 7456	Stuehl Dunagan Johnson			
Glenville Greenville Goldens Bridge	1-400 1-350		1	1	2,500 2,000	N. S. Ada. N. S.	4½–6			1	2	Wells N.Y. City Ponds				Tarrytown Dobbs Ferry Mt. Kisco	4 40	55 40	Central Ave. Route 22	Sears. 648	Cropsey			
Harrison Harrison West Hawthorne	1-750; 1-350 1-400 1-400		1	1 Emerg. 1 Hose	3,300 1,500 1,000	N. Y. Ada. N. Y. Ada. N. S.	3½–6					Good Good Ponds	1			Port Chester White Plains White Plains	6	120	Harrison Ave. Col. Ave.	Park 1100 W. P. 400 Plaza 1419	Schneider Grillo Smith			
Hartsdale Hastings-on-Hudson Irvington	1-750 1-500 1-1000	1-75 L P	1 1	2 Hose 1 Rescue	2,500 3,200 3,500	N. S. Ada. N. Y. Ada. N. S.	4½ 3½–6 4½–6	1	1,000	1 1	2 4	Good Fair Good			1	White Plains Dobbs Ferry Dobbs Ferry	4 1 1	32 163 59	Central Ave. West Main St. North Ferris St.	W. P. 343 Hastings 820 Irv. 1570	Krowe McCarthy			
Katonah Larchmont Mamaroneck	1-750; 1-400 2-750 4-1000; 1-750	1-75 L P	1 1	1 Chem. & Foam 1 Patrol	3,000 3,000 9,000	N. S. N. Y N. Y. Ada.	4½–6 3½–6 3½–6	1 2	3,500 500	1 2	4 10	Good Good Good			2 2	Mt. Kisco New Rochelle Port Chester	9 235	200 Spencer Place	Main Street Larchmont Ave.	800 2402	Ferris Towle Becker			
Mohegan Montrose Mt. Kisco	1-750 1-500; 1-350 3-750; 1-350		1	1 Chem. 1 Emerg.	2,000 2,000 4,500	N. S. N. S. N. S.	4½–6 4½–6 4½–6			1	7	Good Fair Good				Own Ambul. Peekskill Mt. Kisco		60 150	Stony Kond Pinel Road Main Street	Peekskill 140 Peekskill 445 6603	Travis Cole Parsell			
Mt. Vernon Millwood New Rochelle	6-750; 1-1000 1-750 2-1000; 5-750	2 1-75; 1-85	2	1 Emerg. 1 3-Tank Chem. 1 Emerg.	12,000 1,500 13,000	N. Y. Ada. N. S. N. Y. Ada.	3½–6 4½–6 3½–6	2 1	6,000 500	2 1	3	N.Y. City N.Y. City Good	1 1	2 L. Pipes 2 L. Pipes	4 3	Mt. Vernon Mt. Kisco New Rochelle	35 90	450	4th Ave. Church Street	Oak. 9000 N. R. 504	Gibson Deems Grab	Dreager		
North White Plains North Tarrytown Ossining	1-750 2-1000; 1-600 2-750; 2-600	1-85	1 1	1 Patrol 1 Patrol 2 Hose	1,500 3,200 5,700	N. S. N. S. Ada. N. S.	4½–6 4½–6 4½	1 1	2,000 1,000	1 1	24 2	Good Good N.Y. City	1	1 L. Pipe	1	White Plains Tarrytown Ossining		250 260	Broadway Beekman Ave. Collin Ave.	W. P. 900 Tarry. 705 Ossining 701	Tacina Cross Bykin			
Peekskill Pleasantville Pelham	4-1000 2-750 1-1000; 1-750	1-75	1 1	1 Patrol	6,750 3,600 3,600	N. S. Ada. N. S. N. Y	4½ 4½ 6	1	500	1 1	2	Good Good Good		1 L. Pipe	2	Peekskill Mt. Kisco New Rochelle	14 3	425 130	Police Station Wheeler Street Police Station Main Street	Peekskill 3 1500 2800	McGuire Wallack	Dreager		
Pelham Manor Pocantico Hills Port Chester	1-1000 2-1000; 2-750	1-85; 1-65	1	1 Patrol	2,000 10,000	N. Y N. S. Ada.	3½ 3½	1	1,000	1 1	2 2	N.Y. City N.Y. City Good	1	2 L. Pipes	1	New Rochelle Tarrytown Port Chester	7 4	30 200	Penfield Place West. Ave.	1000 700 - 1000	Brennan Pelegrino Jansen			
Rye Scarsdale Tarrytown	1-750; 1-500 1-750; 1-600 2-750; 2-600	1-85 1-75	1 1	1 Chem. 1 Hose 1 Squad 1 Hose	3,500 5,000 8,000	N. Y. Ada. N. S. Ada. N. S.	3½ 4½ 3½–6	1	2,000	1 1 2	4	Good Good Good		1 L. Pipe 1 1	1 1 1	Port Chester White Plains Tarrytown	4 14	160 300	Locust N. Y. Post Road Main Street	Rye 136 Scars. 138 Tarry. 21	Costello Dobbs Livingston			
Thomwood Valhalla Verplanck	1-750; 1-300 1-1000 1-1000; 1-500			1 Squad	2,000 1,000 2,500	N. S. N. S. N. S.	4½ 4½	1	1,000	1	2	Good Good Ponds	1			White Plains Crematorio Peekskill	4	60 114	Cleveland Broadway	W. P. 6020 1643	Campbell Bronnon			
Weaver Street White Plains Yonkers	1-1000; 1-750 2-1000; 4-750; 1-85; 1-65 1-1000; 1-750	1 1 2	1 1 2	1 Hose 1 Patrol 1 Emerg.	12,000 25,000	N. Y. Ada. N. S. Ada. N. Y. Ada.	4½ 4½ 5	1	5,000	1 2 3	6-1 Large 6-2 Large	Good Good Good	1 1	1 2 L. Pipes Ladder Pipes on all Aerials	1 2 6	Port Chester or N. Rochelle White Plains Yonkers	4 79 179	115	Weaver Street Mamaroneck Av. School Street	Lamb. 1277 3600 Yonkers 565	Howe Griffen Chambers	Dreager		
Yorktown Heights	1-600; 1-350				1,500	N. S.	4½					Good				Peekskill			Main Street	130	Downing			

District. The total number of paid men in the 44 towns is 108.

Twenty-five, or over half, of the 44 towns or districts having volunteer departments have one fire station each. The other 29 towns have a number of stations ranging from two each in six towns to seven stations in Ossining. Of the total number of 86 stations, 70 per cent are owned by the district or town, 20 per cent are leased from private parties, and 10 per cent are owned by volunteer fire companies. A total of 154 pieces of motor fire apparatus are operated in the 44 towns.

The four paid fire departments in Westchester County are Mt. Vernon, New Rochelle, White Plains, and Yonkers. In addition to a total of 393 paid men, these departments have over 1,000 volunteers on their inactive membership lists.

The conclusion drawn from the survey was that no single county-wide system of fire protection could be effective and economical because of the wide variety in organization, statutory bases, personnel, equipment, and methods among the existing units. However, the report states that these fire protection facilities could be more effectively distributed and the service better coordinated.

The Fire Chiefs' Emergency Plan of Westchester County has recognized this situation and has taken steps to systematize the assistance extended by fire companies to each other. According to the report, if the present plans are carried out, they may serve to remove the basis of the criticism that some of the companies are too narrowly restricting operations and service within their own boundaries.

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Reducing Rural Runs in Clackamas County, Oregon

IN Oregon, the Clackamas County Volunteer Firemen's Association is making an effort to reduce the number of runs made by volunteer fire departments to the rural areas surrounding their towns. Many useless runs have been made when people in the rural areas got excited at the time of fire and called two departments—both making the run several miles out in the country, neither one knowing that the other had been called.

In order to work out a plan to overcome this situation and to assist in forming other rural fire protection districts as provided by state law, a map of the county showing all roads, boundary lines, creeks, springs, water plants, and storage tanks is being prepared. Better co-operation between fire departments is being promoted to improve the fire protection throughout the county.

Of the 172 cities and towns in the state which have fire fighting organizations, 143 depend entirely upon volunteer fire departments, 24 have part-paid and part-volunteer organizations, and only five have fully paid departments. The Clackamas County Volunteer Firemen's Association is composed of departments having 51 per cent or more volunteers on their rosters.

Roster of Fire Companies and Departments Making

United States

Alabama
Vredenburg Fire Dept.

Arizona
Flagstaff Fire Dept.
McNary, Southwest Lumber Mills, Inc., Fire Dept.
Safford Fire Dept.
Yuma Fire Dept. No. 1.

Arkansas
Batesville Fire Dept.
Harrison Fire Dept.

California
Belmont Vol. Fire Dept., Inc.
Ben Lomond Fire Dept.
Brawley Firemen's Assn.
Carmel Fire Dept.
Claremont Fire Dept.
Coachella Vol. Fire Dept.
Crescent City Fire Dept.
Delano Vol. Fire Dept. No. 1
Dinuba Vol. Fire Dept.
El Monte Vol. Fire Dept.
Menlo Park Fire District.
Monterey Fire Dept.
Mountain View Fire Dept.
Needles Fire Dept.
Portola Fire Dept.
Quincy Vol. Fire Dept.
Red Bluff Fire Dept.
Redding Fire Dept.
Rio Vista Fire Dept.
Sanger Vol. Fire Dept.
San Jose, Willow Glen Vol. Fire Dept.
Seal Beach Vol. Fire Dept.
Wasco Vol. Fire Dept.
Yreka Fire Dept.

Colorado
Florence Fire Dept. No. 1.
Fort Morgan Fire Dept.
Holyoke Vol. Fire Dept.
Sterling Vol. Fire Dept.

Connecticut
Ansonia, Fountain Hose Co.
Bloomfield, Blue Hills Vol. Fire Dept., Inc.
Bridgeport, Trumbull Vol. Fire Co. No. 1, Inc.
Fairfield Fire Dept.
Middletown, Russell Fire Co.
Norfolk Vol. Fire Dept., Inc.
North Granby, Lost Acres Fire Dept.
North Haven Vol. Fire Co.
Roxbury Fire Dept.
Woodbridge Vol. Fire Assn., Inc.
Woodstock, Muddy Brook Fire Dept.

Delaware
Clayton Fire Co.
Dover, Robbins Hose Co.
Seaford Vol. Fire Dept.
Smyrna Citizens' Hose Co.

Florida
Sebring Firemen, Inc.
Stuart Fire Dept.

Georgia
Cedartown Fire Dept.

Idaho
Lewiston Fire Dept.
Preston Vol. Fire Dept.
Shelley Vol. Firemen.

Illinois
Bloomingdale Vol. Fire Dept.
Brookfield Fire Dept.
Bushnell Fire Dept.
Crete Fire Dept.
Dundee Fire Dept.
Elmhurst Fire Dept.
Franklin Park Fire Dept.
Geneseo Fire Dept.
Gilman Fire Co.
Gurnee Vol. Fire Dept.
Illiopolis Vol. Fire Co.
Lockport Fire Dept.
McLeansboro Fire Dept.
Melrose Park Fire Dept.
Midlothian Fire Dept.
Millstadt, Union Fire Co.
Morton Fire Dept.
Mt. Pulaski Fire Dept.
Niles Vol. Fire Dept.
O'Fallon Fire Dept. No. 1.
Palatine Fire Dept.
Park Ridge Fire Dept.
Plainfield Fire Dept.
Riverside Fire Dept.
Roselle Vol. Fire Dept.
Schiller Park Fire Dept.
Steger Fire Dept. No. 1.
Stockton Fire Dept.
Sycamore Fire Dept.
Vandalia Vol. Fire Dept.
Western Springs Fire Dept.
Westmont Fire Dept.
Wheaton Vol. Fire Dept.
Wilmette Fire Dept.
Winnetka Fire Dept.
Wood River Fire Dept.
Woodstock Fire Dept.

Indiana
Columbia City Fire Dept.

Iowa
Atlantic Fire Dept.
Clarion Vol. Fire Dept.
Denison Fire Dept.
Eldora Vol. Fire Dept.
Grand Jct. Vol. Fire Dept.
Oelwein Fire Dept.
Vinton Vol. Fire Dept.
Webster City Fire Dept.
Whittemore Fire Dept.

Kansas
Burlington Fire Dept.
Hutchinson Fire Dept.
Jetmore Fire Dept.
Kiowa Fire Dept.
Manhattan Fire Dept.
Marion Fire Dept.
Marysville Vol. Fire Dept.
Wamego Fire Dept.

Kentucky
London Fire Dept.

Louisiana
Haynesville Fire Dept.
Thibodaux Fire Dept.
Welsh Vol. Fire Dept.

Maine
Eastport Fire Dept.
Freeport Fire Dept.
Presque Isle Fire Dept.
Rangeley Fire Dept.
Richmond Fire Dept.
Rumford Fire Dept.
Springvale Fire Dept.

Maryland
Bethesda Vol. Fire Dept.
Frederick, United Steam Fire Eng. Co. No. 3.
Howard County Vol. Firemen's Assn., Inc., Ellicott City.
Lansdowne Vol. Fire Co.
LaPlata Vol. Fire Dept.
Takoma Park Vol. Fire Dept.

Massachusetts
Adams, Alert Hose Co.
Ashburnham Fire Dept.
Belchertown Fire Dept.
Dalton Vol. Fire Dept.
Harwich Fire Dept.
Ocean Bluff, Marshfield Fire Dept., Co. No. 1.
South Hadley Fire Dept.
Sudbury Fire Dept.
Truro Fire Dept., So. Truro.
Westport Vol. Fire Co.

Michigan
Bangor Fire Dept.
Birmingham Fire Dept.
East Detroit Fire Dept.
Harbor Springs Fire Dept.
Newaygo Vol. Fire Dept.
Olivet Fire Dept.
Richville Community Fire Assn.
South Range Vol. Fire Dept.

Minnesota
Breckenridge Fire Dept.
Ellendale Fire Dept.
Erskine Vol. Fire Dept.
Gibbon Fire Dept.
Keewatin Fire Dept.
Madelia Fire Dept.
Morgan Fire Co.
Mountain Lake Fire Dept.
New Ulm Fire Dept., Eng. House No. 1.
Nopeming Fire Dept.
Northfield Fire Dept.
North St. Paul Fire Dept.
Waterville Vol. Fire Co.
Wheaton Fire Dept.
White Bear Lake Fire Dept.

Missouri
Fredericktown Fire Dept.
Sullivan Vol. Fire Dept.

Nebraska
Ansley Vol. Fire Dept.
Blair Fire Dept.
Gresham Vol. Fire Dept.
Nebawka Vol. Fire Dept.
Sargent Vol. Fire Dept.
West Point Vol. Fire Dept.
Wilber Vol. Fire Dept.

Nevada
Sparks Fire Dept.

New Hampshire
Franklin Fire Dept.
Peterborough Fire Dept.
Plymouth Fire Co.
Whitefield Fire Dept.

New Jersey
Atco Vol. Fire Co. No. 1, Inc.
Atlantic City, Leeds and Lippincott Co.
Atlantic County Firemen's Assn., Mays Landing.
Basking Ridge Fire Co. No. 1
Bogota Fire Dept.
Cedarville Fire Dept.
Chatham Fire Dept.
Dover Fire Dept.
Edgewater Fire Dept.
Essex Fells, Hose Co. No. 1.
Gibbstown Vol. Fire Co.
Haddon Hts. Fire Dept.
Harrington Park Fire Co. 1.
Jamesburg Fire Co. No. 1.
Leonia Fire Dept.
Lincoln Park Fire Dept.
Livingston Fire Dept.
Maywood, Peerless Hose Co. No. 2.
Merchantville, Delaware Gardens Fire Co.
Merchantville, North Merchantville Fire Co.
Morris County Fire School Assn.
Morristown, Morris Township Fire Dept.
Newark, Pittsburgh Plate Glass Co.
New Brunswick, North Brunswick Vol. Fire Dept.
Pine Brook Vol. Fire Co.
Seaside Park Vol. Co. No. 1.
Stanhope Hose Co. No. 1
Stratford Fire Co. No. 1, Inc.
Verona Engine Co. No. 1.
Wenonah Fire Co. No. 1.
West Caldwell Vol. Fire Dept.
Williamstown Fire Co. No. 1.
Woodstown, Reliance Fire Co., Inc.

New Mexico
Estancia Fire Dept.
Las Vegas, E. Romero Hose & Fire Co.
Las Vegas Fire Dept.

New York
Amagansett Fire Dept.
Bellmore Fire Dept.
Bolton Landing Fire Dept.
Canton Fire Dept., Eng. House 1.
Chateaugay, Protection Hose Co. No. 7.
Chazy Fire Dept.
Depew Fire Dept.
East Hampton Fire Dept.
East Rockaway Fire Dept.
Erie County Vol. Firemen's Assn., Eggertsville.
Freeport Fire Dept., Excelsior H. & L. Co. No. 1.
Garden City Fire Dept.
Garrison Vol. Fire Co., Inc.
Great Neck, Vigilant Eng., H. & L. Co.
Hamburg Vol. Fire Dept.
Hamilton, Fountain Fire Co.
Hastings-on-Hudson Fire Dept.
Haverstraw Fire Dept.
Kenmore Vol. Fire Dept.
King Ferry Fire Co.
Norwich, Maydole Hose Co. No. 2.
Nyack Fire Dept.
Oceanside (L. I.) Fire Dept.
Pearl River, Excelsior Fire Eng. Co.

10,000 Members of the Volunteer Firemen's Section

Pine Plains Hose Co. No. 1.
Point Pleasant Vol. Firemen's Assn.
Port Washington, Protection Eng. Co. No. 1.
Poughkeepsie, Hudson Valley Vol. Firemen's Assn.
Ravena Hose Co. No. 1.
Rochester, Greece Ridge Fire Dept., Inc.
Sayville Fire Dept.
Schenectady, Grand Blvd. Fire Dept. No. 1.
Sharon Springs Fire Dept.
Sidney Fire Dept.
Solvay Fire Dept.
Spring Valley, Hillcrest Fire Dept. No. 1.
Stewart Manor Fire Dept.
Tappan Vol. Fire Assn.
Valley Stream, H. & L. Co.
Valley Stream, Nassau Chemical & Hose Co. No. 1.
Wantagh Fire Dept.
West Nyack Eng. Co. No. 1.
Williamsville, Amherst Fire Council.
Worcester Hose Co.

North Carolina

Albermarle Fire Dept.
Dunn Fire Dept.
Henderson Fire Dept.
Reidsville Fire Dept.
Shelby Fire Dept.
Washington Fire Dept.

North Dakota

Carrington Fire Dept.
Devils Lake Fire Dept.
Drake Vol. Fire Dept.
Edmore Vol. Fire Dept.
Glen Ullin Vol. Fire Dept.
Jamestown Fire Dept.
New Leipzig Vol. Fire Dept.
Valley City Fire Dept.

Ohio

Amherst Fire Dept.
Byesville Fire Dept.
Cheviot Fire Dept.
Granville Vol. Fire Dept.
LeRoy Vol. Fire Dept.
Madeira & Vicinity Fire Dept.
North Canton Fire Dept.
North Lima, Beaver Township Vol. Fire Dept.
Smithville Community Fire Co.
Spencer Vol. Fire Dept.
Swanton Vol. Fire Dept.
Toledo, Adams Township Vol. Fire Dept.
Wharton, Richland Township Vol. Fire Co.
Youngstown Sheet & Tube Co. Fire Brigade

Oklahoma

Apache Vol. Fire Dept.
Cushing Vol. Fire Dept.

Oregon

Beaverton Vol. Fire Dept.
Canby Fire Dept.
Hillsboro Vol. Fire Dept.

Pennsylvania

Albion Vol. Fire Dept., Inc.
Bala-Cynwyd, Union Fire Assn.
Belle Vernon, N. Belle Vernon Vol. Fire Dept.
Berwyn Fire Co. No. 1.
Delaware County Firemen's Assn., Lansdowne.
Dickson, Eagle Hose Co.
Edge Hill Fire Co. No. 1.
Elizabethville, Reliance Hose Co. No. 1.
Emaus Fire Co. No. 1.
Finleyville Vol. Fire Dept.
Greensburg, Hose Co. No. 2.
Greensburg, Hose Co. No. 8.
Harrisburg, Royal Fire Co. No. 14.
Hershey Vol. Fire Co.
Latrobe Vol. Fire Dept.
Lebanon County Firemen's Assn., Palmyra.
Monessen Vol. Fire Dept. and Relief Assn.
Montgomery Vol. Fire Co.
Newtown Square Fire Co.
Oakmont Fire Co. No. 1.
Philipsburg, Reliance Fire Co. No. 1.
Phoenixville, West End Fire Co. No. 3.
Pittston, Jenkins Township Vol. Hose Co. No. 1.
Pocono Manor Assn.
Pottstown, Empire H. & L. Co.
Prospect Park Fire Co. No. 1.
Reading, Goodwill Fire Co. No. 1, Hyde Park.
Ridley Park Fire Co. No. 1.
Stroudsburg, Phoenix Fire Co. No. 2.
Swarthmore Fire and Protective Assn.
Upper Darby, Brookline Fire Co.
Upper Darby Fire Co. No. 1.
Warren State Hospital.
Waynesburg Vol. Fire Co.
West Lawn, West Central Berks District, Zone 4.
West View Fire Co. No. 1.
Windber Fire Co. No. 1.
York, Vigilant Fire Co. No. 1.

Rhode Island

Chepachet Fire Co.
Cranston, Pawtuxet Vol. Fire Co.
Greenwood Vol. Fire Co.
Hope and Jackson Fire Co.
Wickford, North Kingstown Fire Dept.
Woonasquatucket Valley Firemen's League, Graniteville.

South Dakota

Alexandria Fire Dept.
Bonesteel Fire Dept.
Eureka Fire Dept.
Highmore Vol. Fire Dept.
Martin Fire Dept.
Philip Vol. Fire Dept.
Rapid City Fire Dept.
Redfield Fire Dept.
Tripp Fire Dept.
Tyndall, Elliott Hose Co.
Wall Fire Dept.
Wilmot Fire Dept.

Tennessee

Brownsville Fire Dept.
Clarksville Fire Dept.
Etowah Fire Dept.
Norris, Tennessee Valley Authority, Fire Service.

Texas

Beeville Fire Dept.
Bishop Vol. Fire Dept.
Brady Fire Dept.
Carthage Fire Dept.
Conroe Vol. Fire Dept.
Ft. Stockton Vol. Fire Dept.
Jacksonville Vol. Fire Dept.
Kenedy Fire Dept.
Kilgore Fire Dept.
Luling Fire Dept.
McAllen Vol. Fire Dept.
Orange Vol. Fire Dept.
Pilot Point Hose Co. No. 1.
Schulenburg Fire Dept.
Texas City Vol. Fire Dept.
Victoria Fire Dept.

Utah

Bingham Canyon, Bingham Vol. Fire Dept. No. 1.
Logan City & Cache County Fire Dept.
Murray City Fire Dept.

Vermont

Enosburg Falls Fire Dept.
Orleans Fire Dept.
Windsor Fire Dept.

Virginia

Cape Charles Fire Dept.
Charlottesville Fire Dept.
Eastville Fire Dept.
Orange Vol. Fire Dept.
Richmond, Chesapeake & Ohio Ry. Supt. of Fire Prevention.
Warrenton Vol. Fire Dept.

Washington

Cle Elum Fire Dept.
Wapato Fire Dept.

West Virginia

Grafton Vol. Fire Dept.
Marlinton Vol. Fire Dept.
Moorefield Vol. Fire Co.
Salem Vol. Fire Dept.
Terra Alta Vol. Fire Co.
Weston Vol. Fire Dept.

Wisconsin

Adams Fire Dept.
Barron Fire Dept.
Black Creek Vol. Fire Dept.
Horicon Fire Dept.
Hortonville Fire Dept.
Hurley Vol. Fire Dept.
Kimberly Fire Dept.
Lake Geneva Vol. Fire Dept.
Lake Mills Vol. Fire Dept.
Lena Vol. Fire Dept.
Middleton Fire Co. No. 1.
Milton Junction Fire Dept.
Neillsville Fire Dept.
Nekoosa Vol. Fire Dept.
River Falls Vol. Fire Dept.
Seymour Fire Dept.
St. Cloud Vol. Fire Dept.
Van Dyne Vol. Fire Dept.
Viroqua, Fire Co. No. 1.
Waterloo Fire Dept.
West Bend Fire Dept.
Wisconsin Dells, Kilbourn Fire Dept.

Wyoming

Basin Vol. Fire Dept.
Evanston Vol. Fire Dept.
Rawlins Vol. Fire Dept.

Alaska

Anchorage Vol. Fire Dept.
Juneau Fire Dept.
Ketchikan Vol. Fire Dept.
Palmer, Colonial Vol. Fire Dept.
Seward Vol. Fire Dept.

Canada

Alberta

Red Deer Fire Dept.

British Columbia

Courtenay Vol. Fire Dept.
Cumberland Vol. Fire Dept.
Duncan Fire Dept.
Grand Forks Vol. Fire Dept.
Kamloops Vol. Fire Dept.
Kelowna Vol. Fire Brigade
Merritt Fire Dept.
Stewart Vol. Fire Dept.

Manitoba

Dauphin Fire Brigade

New Brunswick

Marysville, Canadian Cottons, Ltd., Gibson Mills.
St. George Vol. Fire Dept.
St. John Fire Dept.
St. John, Maritime Fire Chiefs' Assn.
St. Stephen Fire Dept.

Nova Scotia

Amherst Fire Brigade
Annapolis Royal Fire Co.
Kentville, Dominion Atlantic Ry. Co., Fire Brigade
Kentville Vol. Fire Dept.
Liverpool Fire Co.
New Waterford Fire Dept.
Sydney Mines Fire Dept.

Ontario

Cornwall Vol. Fire Brigade.
Humber Bay Vol. Firemen.
Kirkland Lake Vol. Fire Brigade.
Lakefield Fire Dept.
Leaside Vol. Fire Brigade.
New Liskeard Fire Dept.
Niagara Falls, The Bender Hose Co. No. 2.
Niagara Falls, Rescue Fire Companies.
Oakville Vol. Fire Dept.
Schumacher Fire Dept.
South Porcupine Fire Dept.
Toronto, Imperial Varnish & Color Co. Fire Brigade.

Prince Edward Island

Charlottetown Fire Dept.

Quebec

Montreal, Atlantic Sugar Refineries.
Montreal, Canadian Industries, Ltd.
Noranda Fire Brigade.

Saskatchewan

Rosetown Fire Brigade.
Wilkie Vol. Fire Brigade.

Volunteer Firemen

Professional Journal of the Volunteer Firemen's Section of the National Fire Protection Association

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Volume 3 **May, 1936** Number 5

Fortieth Annual N.F.P.A. Meeting The 40th annual meeting of the National Fire Protection Association will be held this month at Hotel Haddon Hall, Atlantic City, N. J. The sessions will cover four days—May 11 to 14.

Nearly every item on the program will be of interest to volunteers, and anyone that can make the trip is cordially invited to attend. Reduced railroad fares are available. A program has been mailed to the headquarters of fire companies and departments members of the Volunteer Firemen's Section. A copy will be mailed to any other reader on request.

Reports of Technical Committees At the annual meeting the technical committees of the Association will bring in their recommendations. Among important new and revised standards to be presented are those on the following subjects:

- Air Conditioning (Committee on Blower Systems).
- Construction Operations, in connection with bridges and tunnels.
- Care of Fire Hose (Committee on Field Practice).
- Kerosene Stoves and Heaters, Dry Cleaning (Committee on Flammable Liquids).
- Automatic Sprinklers, recommended ordinance.
- Foam Systems, Spark Arresters.
- Motor Craft (Marine Section).
- Marking of Fire Hydrants.

The importance of these reports and the action taken on them lies in the fact that they are used as a basis for state and municipal regulation of fire hazards and details of fire protection and also as insurance requirements.

The above reports have been printed for wide circulation prior to the meeting at which comment on the recommendations is invited, offering a full opportunity to get the benefit of the widest possible range of experience of all N.F.P.A. members. Single copies of any of the above reports will be sent free to any reader of VOLUNTEER FIREMEN interested and readers are invited to participate in the discussion at the meeting. Committee chairmen would consider it a favor if any reader who has suggestions to offer, yet who may not attend the meeting, will transmit them in writing to the executive office.

Support from Long Island Volunteer fire departments protect practically all of the communities on Long Island, one of the great suburban areas of New York City and an important summer playground. Volunteer departments on Long Island are for the most part well equipped, progressive, and strongly manned. In view of this we are pleased at the recognition that our Volunteer Firemen's Section has received from Long Island fire departments.

Departments at such places as Great Neck, Valley Stream, Garden City, and Wantagh were among the first to join the new section. From Port Washington on the northwest side to Amagansett on the southeast side of the island, hundreds of volunteers are enrolled and are receiving VOLUNTEER FIREMEN.

Last month 132 volunteers enrolled from the department at Oceanside. This is the largest enrollment from any department in the entire membership. We salute Oceanside and Long Island.

Alaska Responds No state in the United States and no province in Canada can equal the response to the Volunteer Firemen' Section from the territory of Alaska. According to our records, there are nine organized fire departments in Alaska and, of these nine, five have joined the section for a total of 118 men. The newest department in Alaska is the Colonial Volunteer Fire Department at Palmer, the civic center of the Matamuska Valley Project of the Federal Government. Upon organization, this department enrolled for 25 men.

Fire Fighting Course by Mail The second set of eight lessons on modern fire fighting, prepared by fire authorities in co-operation with the Massachusetts State Department of Education, is now available from the Director of University Extension, State House, Boston. This course was announced in the October issue of VOLUNTEER FIREMEN. The cost is five dollars per set for residents of Massachusetts and eight dollars for non-residents. Many readers would find this extension course valuable, especially in the case of firemen who have been unable to get instruction at regular fire schools.

Wisdom of a Family Conference An entire family of seven in a farm home in Wisconsin was wiped out by fire when the father placed kerosene-soaked corn cobs in the heater. A panic contributed to this wholesale slaughter when the members of the family all went to the front door, which was locked. Apparently they didn't think of the windows.

Sad experiences such as this one strongly emphasize the wisdom of a family conference on what to do in case of fire in the home. J. E. Florin, Superintendent of Fire Prevention of the Industrial Commission of Wisconsin, gives the following instructions under the subject of IF FIRE SHOULD COME TONIGHT for fire chiefs to pass along to the people in their communities.

In case of a night fire, make sure that every member of the family is awakened and knows of the fire. Next send in a fire alarm to the nearest fire department. If living in a city having a fire alarm system, see that every member of the family knows the location of the nearest alarm box and how to turn in an alarm. If reporting a fire by telephone, be sure to tell Central that you want to put in a fire call, and give the exact location of the building on fire.

Next do what you can to extinguish the fire or at least to hold it in check until the arrival of the fire department. One or more approved fire extinguishers should be in plain sight and within easy reach, and the older members of the family should know how to operate them, directing the contents to the base of the fire. Know when and how best to use a pail of water, a wet broom, rug, blanket or coat.

Discuss in advance the several available means of escape—outside doors, doors to porches, communicating inside doors to other parts of the building not affected by fire, windows and ladders.

Membership Plan

Volunteer Firemen's Section National Fire Protection Association

WHERE 20 or more firemen in a volunteer company or department affiliate with the Volunteer Firemen's Section the cost is 50 cents a year *per man*. Each fireman will receive one copy of VOLUNTEER FIREMEN, the monthly journal of the Volunteer Firemen's Section, mailed regularly to his home address. The company or department automatically becomes a member of the National Fire Protection Association and is entitled to full privileges of membership. All the literature regularly issued to N.F.P.A. members is mailed to headquarters of the company or department.

Membership may be applied for by one member of the company or department collecting 50 cents for each of the 20 or more members and making a single remittance for the group, or the company or department may take a membership for its men and make a single remittance from the company or department treasury.

Companies With Less Than 20 Members

Because of the large amount of material mailed to members, not less than $10.00 can be accepted from any company or department for membership dues. In the case of companies or departments with less than 20 men this means that the cost divided among them will be slightly higher per man. Of course, some such companies or departments may prefer to make a single remittance of $10.00 from the company or department treasury. In other cases a few interested citizens, not members of the company or department, may be glad to contribute 50 cents apiece to make up the required minimum of 20, so that the members may secure the rate of 50 cents per man.

These companies or departments have full privileges of N.F.P.A. membership as above, and each member receives the monthly magazine, VOLUNTEER FIREMEN, at his home.

Warning Signals that Warn!

Fig. 930
Junior Type Roto-Rays for Chiefs' Cars, Ambulances, Police Department, Emergency Cars, and smaller types of suburban apparatus.

You must have a clear path for your apparatus through even the heaviest traffic. Buckeye Roto-Rays and whistles clear the way for you by night as well as by day.

Three powerful, revolving, red lights on the Roto-Rays bite deeply into the night and instantly identify a piece of apparatus or emergency car many blocks away.

The Buckeye Exhaust Whistle has a piercing, attention-compelling sound that nothing can equal. The ceaseless roar of traffic is completely drowned under the commanding blasts of this whistle. More than five hundred progressive fire departments throughout the United States use this whistle.

Write for complete details on Roto-Rays and whistles, as well as on other Buckeye fire department equipment.

BUCKEYE IRON & BRASS WORKS
324 East Third St., Dayton, Ohio

Fig. 931
Large Type Apparatus Roto-Rays

Fig. 935
Junior Exhaust Whistle

Fig. 936
Medium Exhaust Whistle

Fig. 937
Heavy Duty Exhaust Whistle

BUCKEYE
Shut-off Nozzles · Roto-Rays · Whistles

2514 Copies Sold in Ten Weeks

CROSBY - FISKE - FORSTER
HANDBOOK of FIRE PROTECTION

THE HANDBOOK is the standard reference volume for beginners and experienced men specializing in fire prevention and protection. It is not a manual of fire fighting practice.

The HANDBOOK was first published in 1896. Over one hundred well known authorities in the field have helped in the preparation of this new and greatly enlarged edition.

Eighth Edition
1142 pages; 4¼ x 6½
242 illustrations, 161 tables
Handsomely bound
$4.50 postpaid

NATIONAL FIRE PROTECTION ASSOCIATION VF May 36
60 Batterymarch Street, Boston, Mass.

Please send me.....copies of your Handbook, for which

$.....($4.50 per copy, postpaid) is enclosed.

Name..... **Address.....**

Answers to Discussion Questions for April

Evidence At Incendiary Fires

35

Q. *What are the things that firemen should look for as evidence of incendiarism when reaching the scene of a fire?*

A. *The firemen first on the scene should notice who is around the fire, the actions and talk of the owner if he is present, the location of the fire and whether there is more than one fire, whether flammable liquids have been used, whether windows and doors are opened or closed and locked, see if there are any tracks around the building, and look for devices that may have been used to start the fire.*

All conditions should be observed closely. It is essential that evidence of incendiarism be noted by more than one fireman because at a trial the testimony of several men as to a certain condition at a fire is more valuable than the testimony of one man. All evidence should be preserved as nearly as possible just as it is found. Suspicious appearing articles should carefully be examined, counted or listed, and photographs taken.

The smell of gasoline, kerosene, or oil burning should be looked upon with suspicion. The premises may be found saturated with such flammable liquids. The manner in which the fire burns should be noted, for example, dense black smoke may indicate the use of kerosene. Two or more separate fires should be looked for.

The appearance of the inside of the building may indicate whether the fire resulted from accident or from design. Furniture or merchandise may have been placed so as to retard the work of the firemen, or perhaps much of the stock and equipment had been removed. Partitions may have been cut through, and flammable materials so placed to quickly spread the fire throughout the building.

It is important to locate the point or points of origin of the fire. It may be that a "fire trap" such as a clock, candle, or electrical device can be found that was used to start the fire.

Problem Questions
FOR MAY

Suggested for discussion at company and department meetings this month

37

What can the fire department do to reduce the injuries and loss of life in their community each year from fireworks?

38

What are the hazards of cutting and welding operations and what are the necessary precautions and safeguards?

Watch for the answers in the next issue of VOLUNTEER FIREMEN

All-Purpose Pump For Forest Work

36

Q. *What is a useful all-purpose type of pump for forest fire work?*

A. *A portable power pump consisting of a pump and a gasoline-driven motor.* It should be sufficiently light in weight so that it can be carried easily by one to four men. The superiority of the portable pump lies in its mobility and resultant ability to operate wherever a water supply is available.

Such a pump can be taken to a swamp hole, woods stream, pond, or other source of water which cannot be reached by an automobile. This fact also makes a pump of this kind valuable for fighting building fires in rural territory where water supplies are difficult to reach with heavy apparatus.

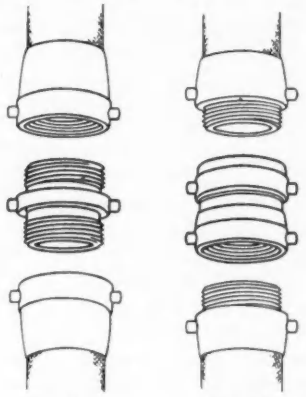
Dependability is the most important requirement in a portable power pump. The motor should be of a type that will be reliable in starting under all weather conditions. This should be thoroughly investigated before equipment is purchased.

The kind of power pumps needed by any community subject to brush or forest fires depends upon the:

1. Distribution and availability of open water in the brush and forest territory.
2. Extent, distribution, and passability of its roads during the forest fire season.
3. Topography and accessibility of the wooded and brush country.

Some communities may need more than one type of pumping unit because of a complexity of conditions within their geographical limits.

Fire Tools



Double Male **Double Female**

Double Hose Connections

MOST fire departments have a regular practice for placing hose in the hose bed of wagons, and for taking it off, which brings the right kind of connection out at the end of the hose which is to be connected. Thus a female end is generally presented for connection to the hydrant and a male end for the nozzle. To take care of situations which cannot be foreseen, double connections are carried, usually at least one double male connection and one double female connection on each piece of apparatus. They are a great convenience at many times and are often invaluable when emergency connections of one sort and another are required in hose operations.

Operating practice sometimes calls for laying the line from the hydrant to the fire and other times from the fire to the hydrant. With double connections available a line can be promptly laid with connections facing whichever way permits most rapid and convenient handling.

The pumping plant of an eastern community was put out of service by the recent floods and the town had no water. The fire department came to the rescue. A pumper took section from a lake the supply from which was safe to use, and pumped *into* a hydrant on the city system.

A double female connection made this possible.

$10.00 Prize Can Be Yours

Enter Your Experience With Extinguishers For Award in Pyrene Prize Letter Contest

EX-CHIEF EDWARD HUEBNER, of Kenmore, New York, has an extra $10.00 to spend this month because he took the trouble to send in the experience with extinguishers reported in the prize winning letter below. The $10.00 awarded next month in this contest, conducted co-operatively by the Pyrene Manufacturing Company of Newark, New Jersey, and the editors of VOLUNTEER FIREMEN, can just as well be yours.

Almost every reader of this magazine has seen the time when the prompt use of an extinguisher of the right type in the right place has saved serious loss of property, not to speak of injuries and deaths averted.

As the result of many experiences like that described by Mr. Lamplugh, second prize winner this month, many cities are equipping all their police cars, as well as those of the fire department, with fire extinguishers of one or more types.

FIRST PRIZE — $10.00

EDWARD HUEBNER, *Ex-Chief*,
Volunteer Fire Dept., Kenmore, N. Y.

No Telephone, No Fire Department

"One evening a few years ago, my wife and I took a ride in the country to visit relatives who operate a general store. The boys in the community were gathered in the store as it was their custom during the winter months.

"We were there only a short while when one of the boys came running into the living room, shouting: 'Schlossers' house is on fire.' We rushed to the window (the house was across the road) and could see the curtains in the dining room all ablaze.

"The only two telephones in the neighborhood were out of order. I ran to my car and got my carbon tetrachloride fire extinguisher which I always carry. I broke a window in the house as there was nobody at home and pumped the carbon tetrachloride on to the place from which I thought the blaze was coming. The liquid subdued the flames immediately. Several of us entered the house, ventilated it, and found that an overheated furnace had caused the fire. Since I had used up all the carbon tetrachloride, we had to use a few buckets of water to complete the job.

"My wife and another woman in the meantime had driven to the nearest fire house, two and a half miles away, but the fireman in charge could not send out a piece of apparatus unless the women would guarantee the fire department $50, as the house on fire was out of their district. The women were not in a position to do that."

SECOND PRIZE — $3.00

JOHN T. LAMPLUGH, *Secretary*
Fire Company No. 1, Linwood, Pa.

Puts Out Huge Tank Truck Fire

"During the early part of last month a huge tank truck was taking on a load of fuel oil at a loading rack of a local oil company at Marcus Hook, when suddenly without warning fire broke out in the motor of the truck.

"A police cruiser was passing the scene at the same time and the officer driving the car, realizing the danger due to close proximity of the flammable liquids to the near-by business section of the town, pulled his car up to the curb. He alighted and took a carbon dioxide portable fire extinguisher from the running board of his car and immediately extinguished the blaze.

"In the meantime two engine companies were arriving on the scene, but it was not necessary for the boys to go into service as the job was complete and the damage trifling.

"I learned that the same extinguisher carried on the police car has saved two pleasure cars, since its recent installation, thus keeping down local fire losses and needless runs with apparatus."

THIRD PRIZE — $2.00

ALLEN H. CLARK, *Chief*
Fire Dept., Lakefield, Ontario

Employees Save Large Elevator

"A few days ago we received an alarm for a large elevator and grist mill where one of the large electric motors located in the basement had caught fire. Upon arrival we found that the employees had used a soda-acid fire extinguisher and had managed to control the blaze until we arrived. This was the only available means of extinguishing the fire that they had close at hand.

"I know that soda-acid extinguishers are not the proper appliances for extinguishing electrical fires. Nevertheless, being the only protection at hand, these employees saved a nasty job for us as well as preventing a fire loss which would have run into thousands of dollars. The motor in question was in the center of the building, and although the motor itself was destroyed, the other property was left intact.

"This, in my opinion, is one case where the intelligent use of any available fire-protection appliance was justified."

HONORABLE MENTION

GUS W. HELMERS
Volunteer Fire Dept., Centerville, Ala.

W. S. CASHMAN, *Captain*
Fire Patrol No. 6, The Bronx, N. Y.

JOHN R. SHANK, *Chief*
Fire Department, Poultney, Vt.

Shuredry
SALVAGE COVERS
Reduce WATER DAMAGE & INSURANCE RATES
SHUREDRY is the cover that fire chiefs all over the country have endorsed for superior service. Made of our special process chemically treated canvas they resist both heat and cold. SHUREDRY covers will not crack or split on your storage shelves — easy to handle — give better service.
Address our plant nearest you for full information and prices.
Fulton Bag & Cotton Mills
ATLANTA ST. LOUIS DALLAS
MINNEAPOLIS BROOKLYN NEW ORLEANS KANSAS CITY, KAN.

Rules . . .

PYRENE PRIZE LETTER CONTEST

1. Contestants in the Pyrene Prize Letter Contest must be members of their local fire department.

2. Letters are to describe actual experiences where any approved fire extinguisher of any make has saved lives or property.

3. Trade names may be used but will be deleted in publication. Publishers reserve the right to edit winning letters to permit publication.

4. Each contestant automatically vouches for the truth of the facts presented from his own or others' experience.

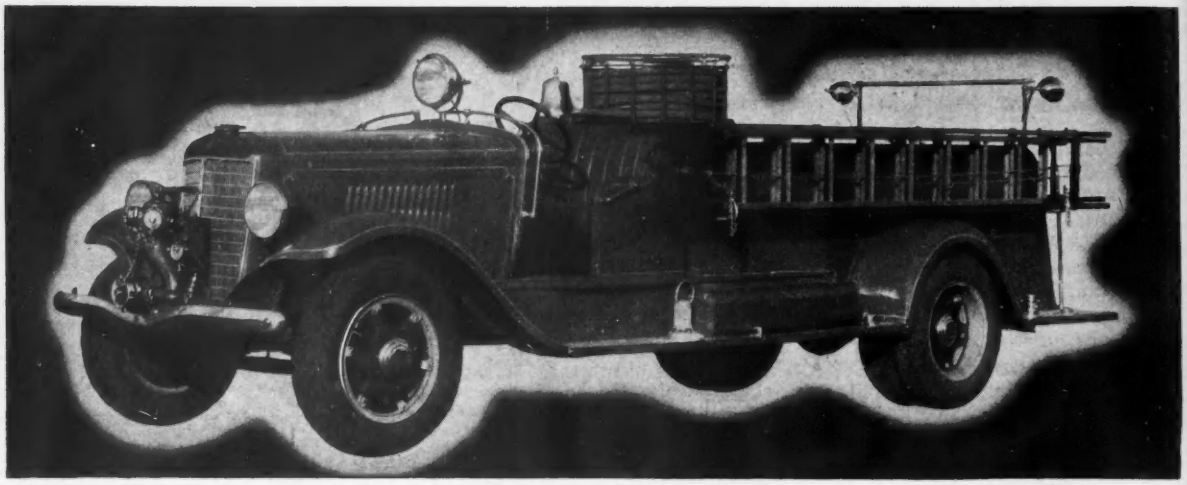
5. Only one letter may be submitted each month.

6. Letters must be legibly written in ink or typewritten on white paper, one side only. Preference will be given to letters not over 250 words in length.

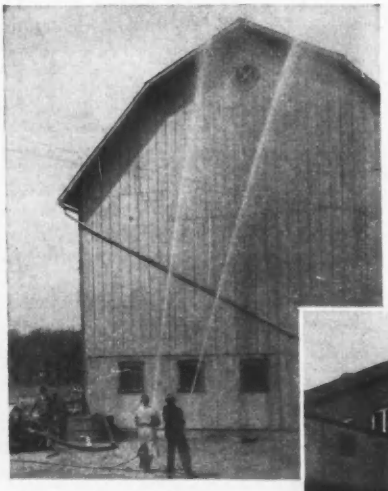
7. Letters received after the 8th of the month will be judged in following month's competition.

8. Monthly prizes in cash will be: 1st, $10.00; 2nd, $3.00; and 3rd, $2.00.

9. Address contest letter to Pyrene Prize Letter Contest, National Fire Protection Association, 60 Batterymarch St., Boston, Mass.



EVERYTHING!

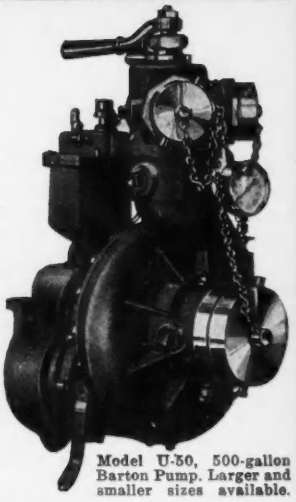


Pressures Up to 250 Pounds

Some thrill to fight fires with a Barton! You're master of any situation. Make runs at 50, 60 miles per hour. No delay when you arrive — at your command instantly are long, powerful streams. Select any modern fire truck, and a Barton Pump can be front mounted at very low cost.

Chief Evans, Manteo, N. C., writes: "Not long ago a building in our business section caught fire from an explosion of forty gallons of gasoline, and it sure looked as if the whole town would go. However, WITH THE QUICK RESPONSE OF THE FIRE COMPANY AND OUR AUTOMATIC BARTON PUMP, THE FIRE LASTED BUT A FEW MINUTES.

"We do all our pumping at draft from ditches or creeks (sometimes very dirty water), yet we have not had one minute's trouble. If we had to buy another pumper, it would sure be equipped with a Barton U-Type Pump."



Model U-50, 500-gallon Barton Pump. Larger and smaller sizes available.

Yes, Sir! EVERYTHING necessary to REAL PROTECTION you'll find in Barton Centrifugal Fire Pumps . . . automatic prime for instant action . . . front mounting to SAVE HUNDREDS OF DOLLARS IN FIRST COST . . . geared drive to protect your truck motor.

Barton U-Type Fire Pumps, built in 350, 400, 500 and 600-gallon sizes, are UNDERWRITERS' TESTED, and we have other models at still lower prices. Write for Bulletin 75.

BARTON FIRE PUMPS

AMERICAN STEAM PUMP COMPANY

BATTLE CREEK, MICHIGAN ◆ PUMPS AND PUMPS ONLY SINCE 1873

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